

February 8, 2022

The Honorable Chair and Members of the Hawai'i Public Utilities Commission 465 South King Street Kekuanao'a Building, First Floor Honolulu, Hawai'i 96813

Dear Commissioners:

Subject: Docket No. 2007-0008

Renewable Portfolio Standards Law Examination

In accordance with Decision and Order No. 23912 and the Framework for Renewable Portfolio Standards, issued December 20, 2007, attached is the Renewable Portfolio Standard Status Report for the year ended December 31, 2021 for Hawaiian Electric.¹

Sincerely,

/s/ Kevin M. Katsura

Kevin M. Katsura Director, Regulatory Non-Rate Proceedings

c: Division of Consumer Advocacy R.J Hee/T. Blume H. Curtis

¹ "Hawaiian Electric" or "Company" refers to Hawaiian Electric Company, Inc., Hawai'i Electric Light Company, Inc., and Maui Electric Company, Limited. On December 20, 2019, the State of Hawai'i Department of Commerce and Consumer Affairs ("DCCA") approved Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc. and Maui Electric Company, Limited's application to do business under the trade name "Hawaiian Electric" for the period from December 20, 2019 to December 19, 2024. See Certificate of Registration No. 4235929, filed December 20, 2019 in the Business Registration Division of the DCCA.

2021 Renewable Portfolio Standard Status Report

Hawaiian Electric For the Year Ended December 31, 2021

This report was prepared pursuant to the Framework for Renewable Portfolio Standards, which was adopted by the Hawai'i Public Utilities Commission ("Commission") in Docket No. 2007-0008.¹

Pursuant to Hawai'i Revised Statutes § 269-92, the Renewable Portfolio Standard ("RPS") requirement, as a percentage of net electricity sales, for year 2020 is 30%, 2030 is 40%, 2040 is 70%, and 2045 is 100%.

Hawaiian Electric achieved a consolidated RPS of 38.4% in 2021. In accordance with present RPS guidelines, this RPS does not include the electrical energy savings from energy efficiency and solar water heating technologies.² The 38.4% RPS was achieved in 2021 through the use of diverse renewable energy resources (biomass, geothermal, photovoltaic, hydro, wind, and biofuels) and customer-sited, grid-connected technologies (primarily photovoltaic systems).

The O'ahu, Hawai'i Island, and Maui County systems achieved 33%, 60%, and 50% RPS, respectively.

Hawaiian Electric continued to increase its renewable energy portfolio in 2021. The approximate 4 percentage point increase in RPS over 2020 was driven by a full year of production from the Na Pua Makani wind farm, full year production of the Puna Geothermal Venture plant returning to service at partial capacity, and an increase in customer adoption of private rooftop solar. The increases in renewable energy were partially offset by an approximate 2% increase in electric sales compared to 2020.

New customer-sited energy resources, Community-Based Renewable Energy, and Feed-In Tariff installations totaled 53 MW.

Electrical energy generated using renewable energy resources, including customersited, grid-connected technologies, increased by 373,426 megawatt hours in 2021, a 13.3% increase compared to the previous year.

¹ The Framework for Renewable Portfolio Standards was adopted by Decision and Order No. 23912, issued December 20, 2007, and revised by the Commission on December 19, 2008 (Order Relating to RPS Penalties). ² On April 25, 2011, Act 010 Relating to Renewable Portfolio Standards was signed into law. Act 010 provided that, as of January 1, 2015, electrical energy savings from energy efficiency and solar water heating technologies do not count towards calculating RPS. It also amended the definition of "renewable electrical energy" to include, beginning January 1, 2015, customer-sited, grid-connected renewable energy generation.



2021 Renewable Portfolio Standard Status Report

Hawaiian Electric For the Year Ended December 31, 2021

(In Net Megawatt Hours)

| | 2021 | | | | 2020 | | | | | | |
|---|--|--|---|--|--|----------------|-------|-------|-------|-------|-------|
| _ | | | Maui | | TOTAL | | | | | | |
| _ | Oʻahu | Hawai'i | County | TOTAL | | | | | | | |
| Electrical Energy Generated Using Rene | wable Energ | y Sources | | | | | | | | | |
| Biomass (including municipal solid waste) ¹ | 366,365 | | | 366,365 | 369,239 | | | | | | |
| Geothermal ¹ | | 183,391 | | 183,391 | 9,640 | | | | | | |
| Photovoltaic and Solar Thermal ¹ | 372,154 | 3,866 | 14,333 | 390,353 | 398,376 | | | | | | |
| Hydro ¹ | | 43,050 | | 43,050 | 28,594 | | | | | | |
| Wind ¹ Biofuels Customer-Sited, Grid-Connected ² TOTAL TOTAL SALES | 274,167 24,324 985,130 2,022,140 6,169,654 | 154,904 46,485 194,196 625,891 1,043,783 | 272,054 972 238,710 526,068 1,047,666 | 701,124 71,780 1,418,036 3,174,100 8,261,103 | 594,569 74,507 1,325,750 0 2,800,674 0 8,120,210 | | | | | | |
| | | | | | | RPS PERCENTAGE | 32.8% | 60.0% | 50.2% | 38.4% | 34.5% |

¹ Renewable electrical energy generation is based on recorded data from Feed-In Tariff contracts, Independent Power Producers that have Power Purchase Agreements with Hawaiian Electric, and Hawaiian Electric-owned grid-scale projects such as West Loch PV.



² Renewable electrical energy generation from customer-sited, grid-connected technologies is based on known system installations for 2021 including Net Energy Metering ("NEM") installations and non-NEM systems. Recorded generation data was used when available. For systems where recorded data was not available, estimates were made based on reasonable performance assumptions for typical systems.

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